=> fil reg; d que 12; fil capl; d que 113; fil toxcenter; d que 124; fil uspatf; d que 133; fil casrea; d que 137
FILE 'REGISTRY' ENTERED AT 12:33:21 ON 03 JAN 2006
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STRUCTURE FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7 DICTIONARY FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7

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http://www.cas.org/ONLINE/UG/regprops.html

L2

832 SEA FILE=REGISTRY ABB=ON CC[REALM] [REALM] CC/SQSP

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FILE COVERS 1907 - 3 Jan 2006 VOL 144 ISS 2 FILE LAST UPDATED: 2 Jan 2006 (20060102/ED)

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# http://www.cas.org/infopolicy.html 'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L2	832	SEA	FILE=REGISTRY ABB=C	N CC[REALM][REALM]CC/SQSP
L4	291	SEA	FILE=CAPLUS ABB=ON	L2
L5	161	SEA	FILE=CAPLUS ABB=ON	L4 AND P/DT
L6	130	SEA	FILE=CAPLUS ABB=ON	L4 NOT L5
L7	77	SEA	FILE=CAPLUS ABB=ON	(L5 NOT AY>1997) OR (L6 NOT PY>1997)
L8	237864	SEA	FILE=CAPLUS ABB=ON	ANTIBOD?/OBI
L9	111373	SEA	FILE=CAPLUS ABB=ON	CONJUGAT?/OBI
L10	8781	SEA	FILE=CAPLUS ABB=ON	HETEROLOG?/OBI
L11	14912	SEA	FILE=CAPLUS ABB=ON	TAG/OBI OR TAGGED/OBI
L12	193978	SEA	FILE=CAPLUS ABB=ON	FUSION/OBI OR FUSED/OBI
L13	10	SEA	FILE=CAPLUS ABB=ON	L7 AND (L8 OR L9 OR L10 OR L11 OR L12)

FILE 'TOXCENTER' ENTERED AT 12:33:21 ON 03 JAN 2006 COPYRIGHT (C) 2006 ACS

FILE COVERS 1907 TO 3 Jan 2006 (20060103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TOXCENTER has been enhanced with new files segments and search fields. See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

See http://www.nlm.nih.gov/mesh/

http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 med data changes.html http://www.nlm.nih.gov/pubs/techbull/nd05/nd05 2006 MeSH.html

for a description of changes.

L2	832	SEA	FILE=REGISTRY ABB=ON	CC[REALM] [REALM] CC/SQSP
L14	161	SEA	FILE=TOXCENTER ABB=ON	
L18	71	SEA	FILE=TOXCENTER ABB=ON	L14 NOT PY>1997
L19	242833	SEA	FILE=TOXCENTER ABB=ON	I ANTIBOD?
L20	68822	SEA	FILE=TOXCENTER ABB=ON	I CONJUGAT?
L21	16690	SEA	FILE=TOXCENTER ABB=ON	HETEROLOG?
L22	14435	SEA	FILE=TOXCENTER ABB=ON	TAG OR TAGGED
L23	57981	SEA	FILE=TOXCENTER ABB=ON	FUSION OR FUSED
L24	13	SEA	FILE=TOXCENTER ABB=ON	L18 AND (L19 OR L20 OR L21 OR L22
		OR I	L23)	

FILE 'USPATFULL' ENTERED AT 12:33:21 ON 03 JAN 2006
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Dec 2005 (20051229/PD)
FILE LAST UPDATED: 29 Dec 2005 (20051229/ED)
HIGHEST GRANTED PATENT NUMBER: US6981281
HIGHEST APPLICATION PUBLICATION NUMBER: US2005289677
CA INDEXING IS CURRENT THROUGH 29 Dec 2005 (20051229/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Dec 2005 (20051229/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

>>> USPAT2 is now available. USPATFULL contains full text of the >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< >>> /PK, etc. >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< >>> enter this cluster. <<< <<< >>> Use USPATALL when searching terms such as patent assignees, <<< >>> classifications, or claims, that may potentially change from <<< >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

L2	832	SEA	FILE=REGISTRY ABB=ON CC[REALM] [REALM] CC/SQSP
L25	125	SEA	FILE=USPATFULL ABB=ON L2
L26	16	SEA	FILE=USPATFULL ABB=ON L25 NOT AY>1997
L27	132162	SEA	FILE=USPATFULL ABB=ON ANTIBOD?
L28	150426	SEA	FILE=USPATFULL ABB=ON CONJUGAT?
L29	44146	SEA	FILE=USPATFULL ABB=ON HETEROLOG?
L30	111638	SEA	FILE=USPATFULL ABB=ON TAG OR TAGGED
L31	241116	SEA	FILE=USPATFULL ABB=ON FUSION OR FUSED
L32	62633	SEA	FILE=USPATFULL ABB=ON (ANTIBOD? OR CONJUGAT? OR HETEROLOG?
		OR	TAG OR TAGGED OR FUSION OR FUSED)/IT
L33	16	SEA	FILE=USPATFULL ABB=ON L26 AND (L27 OR L28 OR L29 OR L30
		OR I	L31 OR L32)

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FILE CONTENT: 1840 - 1 Jan 2006 VOL 144 ISS 1

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Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L2 832 SEA FILE=REGISTRY ABB=ON CC[REALM] [REALM] CC/SQSP
L34 2 SEA FILE=CASREACT ABB=ON L2
L35 1 SEA FILE=CASREACT ABB=ON L34 AND P/DT
L36 1 SEA FILE=CASREACT ABB=ON L34 NOT L35
L37 0 SEA FILE=CASREACT ABB=ON (L35 NOT AY>1997) OR (L36 NOT PY>1997)

=> dup rem 113,124,133 FILE 'CAPLUS' ENTERED A

FILE 'CAPLUS' ENTERED AT 12:33:31 ON 03 JAN 2006
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FILE 'USPATFULL' ENTERED AT 12:33:31 ON 03 JAN 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
PROCESSING COMPLETED FOR L13
PROCESSING COMPLETED FOR L24
PROCESSING COMPLETED FOR L33
L38
32 DUP REM L13 L24 L33 (7 DUPLICATES REMOVED)

ANSWERS '1-10' FROM FILE CAPLUS ANSWERS '11-17' FROM FILE TOXCENTER ANSWERS '18-32' FROM FILE USPATFULL

=> d ibib ed abs hitrn 1-10; d iall 11-17; d ibib abs hitrn 18-32

L38 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 1997:358712 CAPLUS Full-text

DOCUMENT NUMBER: 127:148149

TITLE: Epitope analysis of the CS3 fimbrial subunit of human

enterotoxigenic Escherichia coli and the construction

of novel CS3::ST and CS3::LT-B immunogens

AUTHOR(S): Yakhchali, B.; Manning, P. A.

CORPORATE SOURCE: Dep. Microbiology Immunology, Univ. Adelaide,

Adelaide, 5005, Australia

SOURCE: Behring Institute Mitteilungen (1997), 98 (New

Approaches to Bacterial Vaccine Development), 124-134

CODEN: BHIMA2; ISSN: 0301-0457

Medizinische Verlagsgesellschaft mbH PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE: Entered STN: 07 Jun 1997

The surface exposed domains on CS3 fimbriae/fibrillae were characterized and AΒ manipulated to use them as a means of expressing foreign antigenic determinants on the bacterial surface. Three domains within CstH were identified with monoclonal antibodies by western blot, immunofluorescence, and colony blot together with computer predictions, 2 of them being permissive for insertion. To construct hybrid proteins, an epitope from the B subunit of heat labile toxin or the entire coding sequence of mature heat stable toxin was introduced. The proteins were assembled into hybrid fimbriae which could be recognized by antibodies to both CS3 and the foreign epitope. Immunogenicity of the constructs was evaluated following oral and i.p. immunization of mice with the attenuated Salmonella typhimurium strain G30

harboring the hybrid cst operons.

95260-78-9DP, CstH fusion proteins containing IT

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(heat-stable toxin ST; epitopes of CstH fimbrial subunit of enterotoxigenic Escherichia coli and Salmonella expressing CstH-ST and CstH-LT-B immunogens)

L38 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2

1995:559919 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 123:2773

Expression vectors using exotoxin gene signal TITLE:

sequences for the secretory manufacture of proteins

Balganesh, Tanjore S.; Das, Goutam; Visweswariah, INVENTOR(S):

Sandhya S.

Aktiebolaget Astra, Swed. PATENT ASSIGNEE(S):

U.S., 13 pp. Cont.-in-part of U.S. Ser. No. 538,927, SOURCE:

> abandoned. CODEN: USXXAM

Patent DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5399490	A	19950321	US 1991-715941		19910614
PRIORITY APPLN. INFO.:			US 1991-715941	В2	19910614
			US 1990-538927		19900615

Entered STN: 19 May 1995

The construction of a novel secretion vector based on the Escherichia coli AB enterotoxin (st) gene is described. The pre and pro regions of toxin gene are absolutely necessary for extra cellular secretion of the stable toxin. Specific examples show that when the coding sequence for a heterologous peptide is fused in frame to the end of the pro region in the st gene, the resultant vector in an E. coli host secretes the correctly processed heterologous peptide. The application also includes construction of suitable vectors. A general method of purification of heterologous peptides is also described in this application. This novel vector system can be used for hyperprodn. and extracellular secretion of peptides of biol. importance. 163547-14-6 163611-37-8

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(amino acid sequence; expression vectors using exotoxin gene signal sequences for secretory manufacture of proteins)

L38 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 1994:160966 CAPLUS Full-text

DOCUMENT NUMBER: 120:160966

TITLE: Development of mucosal protection against the

heat-stable enterotoxin (ST) of Escherichia coli by

oral immunization with a genetic **fusion** peptide delivered by a bacterial vector

AUTHOR(S): Cardenas, Lucia; Clements, John D.

CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA

SOURCE: Infection and Immunity (1993), 61(11), 4629-36

CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 02 Apr 1994

An LT-B-ST (LT-B/ST) fusion peptide was constructed by genetically joining the AΒ 5' terminus of a synthetic gene coding for the heat-stable enterotoxin (ST) of Escherichia coli to the 3' terminus of the gene coding for the binding subunit of the heat-labile enterotoxin (LT-B) of E. coli. An 8-amino-acid, prolinecontaining linker was included between the LT-B and ST moieties. An aroA mutant of Salmonella dublin transformed with a plasmid carrying this genetic construct expressed a fusion peptide with antigenic determinants of both LT-B and ST. Mice were immunized orally with this strain or with a control strain expressing just LT-B from the same plasmid. Sera and mucosal secretions were obtained and analyzed for the presence of serum IgG and mucosal IgA that were able to recognize LT-B and ST by ELISA and, more importantly, were able to neutralize native ST in the suckling mouse assay. Sera and mucosal secretions from animals immunized with the strain expressing the LT-B/ST fusion exhibited detectable ELISA reactivity against LT-B but not against native ST. However, even in the absence of detectable ELISA reactivity, both sera and mucosal secretions from these animals were able to neutralize the biol. activity of native ST in the suckling mouse assay. These findings demonstrate the development of mucosal protection against ST by oral immunization with a genetic fusion peptide delivered by a bacterial vector.

IT 153353-22-1

RL: PRP (Properties)

(amino acid sequence of)

L38 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 1993:447043 CAPLUS Full-text

DOCUMENT NUMBER: 119:47043

TITLE: Epitope mapping and characterization of antigenic

determinants of heat-stable enterotoxin (STh) of enterotoxigenic Escherichia coli by using monoclonal  $% \left\{ 1,2,...,n\right\}$ 

antibodies

AUTHOR(S): Takeda, Tae; Nair, G. Balakrish; Suzuki, Kumiko; Zhe,

Huang Xiao; Yokoo, Yutaka; De Mol, P.; Hemelhof, W.;

Butzler, J. P.; Takeda, Yoshifumi; Shimonishi,

Yasutsugu

CORPORATE SOURCE: Natl. Inst. Cholera Enteric Dis., Calcutta, 700010,

India

SOURCE: Infection and Immunity (1993), 61(1), 289-94

CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 07 Aug 1993

AB A panel of monoclonal antibodies (MAbs) specific for the heat-stable

enterotoxin (STh) of enterotoxigenic Escherichia coli was produced. All four

MAbs (8G7, 53-4, 11C, and SH1) bound to native STh in an ELISA to various degrees, with clone SH1 showing the best affinity. The MAbs were screened for neutralizing and guanylate cyclase-inhibiting activities by the suckling mouse assay and the cyclic GMP assay using T84 cells, resp. The contact amino acid residues governing the reactivity of the four MAbs were precisely determined by using several chemical synthesized analogs of the various heat-stable enterotoxins (STa's). Three distinct antigenic sites of STh sufficiently removed from each other, one near the N terminus, another in the core functional region of the toxin, and the third in the C-terminal region, were recognized by the different MAbs. MAb SH1, which recognized Asn at position 4 and Tyr at position 5 from the N terminus was 100 times more potent in neutralizing the bioactivity of STh in the suckling mouse assay than was MAb 11C, which recognized Thr at position 16 and Tyr at position 19 from the N terminus of the STh mol. The MAbs which recognized Leu at position 9 from the N terminus (MAb 53-4) and Tyr at position 19 from the N terminus (MAb 8G7) showed intermediate activities in the neutralization assay. The guanylate cyclase-inhibiting activities of SH1 and 11C essentially paralleled the results for the neutralization of bioactivity, while MAbs 53-4 and 8G7 exhibited reverse activity. These results indicate that MAbs that recognize the N-terminal residues which have been shown not to be essential for toxic activity have a potent protective capacity. None of the MAbs reacted with reduced and carboxy-methylated native STh. This suggests that all of the MAbs mediate their effect by reacting with conformation-dependent antigenic determinants.

79153-26-7 85456-43-5 86825-60-7

92465-94-6 95260-80-3 95260-81-4

96107-42-5 96107-43-6

RL: BIOL (Biological study)

(of enterotoxin from Escherichia coli, monoclonal antibodies reactivity with, epitopes in relation to)

L38 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 1990:606104 CAPLUS Full-text

113:206104 DOCUMENT NUMBER:

TITLE: Construction of a nontoxic fusion peptide

for immunization against Escherichia coli strains that

produce heat-labile and heat-stable enterotoxins

Clements, John D.

CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA

Infection and Immunity (1990), 58(5), 1159-66 SOURCE:

CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal English LANGUAGE:

AUTHOR (S):

Entered STN: 08 Dec 1990 ED

A 5' terminus of the gene that codes for the heat-stable enterotoxin of E. AΒ coli (ST) was genetically fused to the 3' terminus of the gene that codes for the binding subunit of the heat-labile enterotoxin of E. coli (LT-B). The STencoding gene used for these studies was constructed synthetically with appropriate restriction sites to permit in-frame, downstream insertion of the oligomer. For this construction, maximum expression of ST antigenicity was obtained when a seven-amino-acid, proline-containing linker was included between the LT-B and ST moieties. The LT-B-ST fusion peptide was purified by affinity chromatog. and consisted of a single polypeptide chain with an apparent mol. weight of 18,000 when examined by sodium dodecyl sulfate (SDS) polyacrylamide gel electrophoresis. There was no evidence of multimer formation and no change in the mobility of the fusion peptide when it was boiled in SDS or in SDS with dithiothreitol. The LT-B-ST fusion peptide was nontoxic, and immunol. determinants of both LT and ST were recognized by antibodies to the native toxins. More importantly, the LT-B-ST fusion peptide ws immunogenic. Animals immunized with crude or purified prepns. containing

the hybrid mol. produced antibodies that were able to recognize native toxin in vitro. Significantly, these antibodies were able to neutralize the biol. activity of native ST.

IT 130455-71-9

RL: PRP (Properties)

(amino acid sequence of)

L38 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 1987:421600 CAPLUS Full-text

DOCUMENT NUMBER: 107:21600

TITLE: Investigation of synthetic Escherichia coli

heat-stable enterotoxin as an immunogen for swine and

cattle

AUTHOR(S): Frantz, Joseph C.; Bhatnagar, Pradip K.; Brown, Albert

L.; Garrett, Linda K.; Hughes, John L.

CORPORATE SOURCE: Norden Lab., Lincoln, NE, USA

SOURCE: Infection and Immunity (1987), 55(5), 1077-84

CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 25 Jul 1987

To study the immunogenicity of E. coli heat-stable enterotoxin (STa), peptides AB STa1-18 and STa5-18 were synthesized, characterized, and conjugated to carrier proteins. Pregnant gilts and heifers were hyperimmunized with the resp. conjugates. Following parturition neonates were challenged with virulent E. coli (K99+STa+). Peptides coupled to ovalbumin and emulsified with Freund adjuvant-elicited antibodies that neutralized toxin-induced fluid accumulation in suckling mice. Peptides coupled to particulate carriers, with or without muramyl dipeptide adjuvant, failed to induce a measurable response. Peak antibody levels in sera were observed following 3 doses of conjugate and persisted for several weeks. The serol. response in cattle was superior to that observed in swine; however, antibody levels in porcine colostrum were higher than those observed in cattle. Clin. observations of neonates from vaccinated dams indicated that passively-obtained antibody provided partial protection from disease, but not as completely as that demonstrable with whole cell bacterins that induced antibodies to pili. However, the data suggest the potential for the usefulness of synthetically prepared antigens.

IT 79153-26-7DP, ovalbumin conjugates 92465-94-6DP

, ovalbumin conjugates 106007-66-3DP, ovalbumin

conjugates

RL: PREP (Preparation)

(preparation and antibody induction by, in cattle and swine)

IT 79153-26-7P 92465-94-6P 106007-66-3P

RL: PREP (Preparation)

(preparation of, of Escherichia coli enterotoxin)

L38 ANSWER 7 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:780934 CAPLUS Full-text

DOCUMENT NUMBER: 135:340218

TITLE: Novel nucleic acids and protein sequences and its uses INVENTOR(S): Tang, Y. Tom; Asundi, Vinod; Zhou, Ping; Xue, Aidong

J.; Ren, Feiyan; Zhang, Jie; Wang, Jian-Rui; Yang, Yonghong; Zhao, Qing A.; Goodrich, Ryle W.; Liu, Chenghua; Drmanac, Radoje T.; Ma, Yunqing; Wang,

Zhiwei; Wehrman, Tom

PATENT ASSIGNEE(S): Hyseq, Inc., USA

SOURCE: PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

## PATENT INFORMATION:

PATENT NO.			PPLICATION N						
WO 2001079254 A1									
W: AE, AG, AL, AM, CR, CU, CZ, DE, ID, IL, IN, IS, MA, MD, MG, MK, SI, SK, SL, TJ, AZ, BY, KG, KZ,	AT, AU, AZ DK, DM, DZ JP, KE, KG MN, MW, MX TM, TR, TT	, BA, BB, F , EE, ES, F , KP, KR, F , MZ, NO, N , TZ, UA, U	BG, BR, BY, FI, GB, GD, KZ, LC, LK, NZ, PL, PT,	BZ, CA, C GE, GH, C LR, LS, I RO, RU, S	CH, CN, CO, GM, HR, HU, LT, LU, LV, SD, SE, SG,				
RW: AT, BE, BF, BJ, GR, IE, IT, LU,	•								
GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR  PRIORITY APPLN. INFO.:  US 2000-522929 20000418  US 2000-668317 20000922  US 2000-695783 20001024  US 2000-728628 20001201  US 2001-770160 20010126  US 2001-783066 20010213  US 2001-816828 20010322									
ED Entered STN: 26 Oct 2001  AB The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.									

370654-75-4 ΙT

RL: PRP (Properties)

(unclaimed sequence; novel nucleic acids and protein sequences and its uses)

L38 ANSWER 8 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:672668 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

135:328136

TITLE:

Human reproductive tract-specific nucleic acids and

their encoded proteins and antibodies

INVENTOR(S):

Rosen, Craig A.; Barash, Steven C.; Ruben, Steven M. Human Genome Sciences, Inc., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 1297 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2001055320 A2	2001080	2 WO 2001-US1339	20010117			
CU, CZ, DE, DK, IL, IN, IS, JP, MD, MG, MK, MN, SK, SL, TJ, TM,	DM, DZ, EE, ES KE, KG, KP, KR MW, MX, MZ, NO TR, TT, TZ, UA	, BB, BG, BR, BY, BZ, , FI, GB, GD, GE, GH, , KZ, LC, LK, LR, LS, , NZ, PL, PT, RO, RU, , UG, US, UZ, VN, YU,	GM, HR, HU, ID, LT, LU, LV, MA, SD, SE, SG, SI,			
GR, IE, IT, LU,	CF, CG, CH, CI	, CM, CY, DE, DK, ES, , NL, PT, SE, SN, TD,	TG, TR			
PRIORITY APPLN. INFO.:		US 2000-PV179065 US 2000-PV180628 US 2000-PV184664 US 2000-PV186350 US 2000-PV189874 US 2000-PV190076 US 2000-PV198123 US 2000-PV205515	20000204 20000224 20000302 20000316 20000317 20000418			

US	2000-PV209467	20000607
US	2000-PV214886	20000628
US	2000-PV215135	20000630
US	2000-PV216647	20000707
US	2000-PV216880	20000707
US	2000-PV217487	20000711
US	2000-PV217496	20000711
US	2000-PV218290	20000714
US	2000-PV220963	20000726
US	2000-PV220964	20000726
US	2000-PV225757	20000814
US	2000-PV225270	20000814

ED Entered STN: 14 Sep 2001

The present invention relates to novel reproductive tract-related AB polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "reproductive tract antigens", and the use of such reproductive tract antigens for detecting disorders of the reproductive tract, particularly the presence of reproductive tract cancer and reproductive tract cancer metastases. More specifically, 2650 isolated reproductive tractassociated cDNA mols. are provided encoding novel reproductive tractassociated polypeptides. Novel reproductive tract polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human reproductive tract associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosis, treatment, prophylaxis, and/or prognosis of disorders related to the reproductive tract, including reproductive tract cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compns. for inhibiting the production and function of the polypeptides of the present invention. [This abstract record is the second of three records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT 367532-90-9P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(amino acid sequence; human reproductive tract-specific nucleic acids and their encoded proteins and antibodies)

L38 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1995:994902 CAPLUS Full-text

DOCUMENT NUMBER:

124:23326

TITLE:

An affinity-based expression cloning method for identifying eukaryotic tyrosine kinases and novel

target proteins

INVENTOR(S):

Schlessinger, Joseph; Skolnik, Edward Y.; Margolis,

Benjamin L.

PATENT ASSIGNEE(S):

New York Univ., USA

SOURCE:

PCT Int. Appl., 221 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO	9524	426			A1		1995	0914	1	OW	995-	US33	85		1	9950	313
	W :	AM,	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	FI,	GΕ,	HU,	JP,	KΕ,	KG,
		KR,	KZ,	LK,	LR,	LT,	LV,	MD,	MG,	MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,
		SD,	SG,	SI,	SK,	TJ,	TT,	UA,	UZ,	VN							
	RW:	ΚE,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙT,
		LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	ΝE,
		SN,	TD,	TG													
US	5677	421			A		1997	1014	Ţ	US 1	1994-	2088	87		1	9940	311
AU	9521	022			A1		1995	0925	1	AU 1	1995-	2102	2		1	9950	313
EP	7530	10			A1		1997	0115	]	EP 1	1995-	9137	55		1	9950	313
	R:	CH,	DE,	FR,	GB,	LΙ											
PRIORITY	APP	LN.	INFO	. :					Į	US 1	1994-	2088	87		A 1	9940	311
									Ī	US 1	1991-	6432	37	:	B2 1	9910	118
									Ţ	US 1	1992-	9063	49		A2 1	9920	630
									1	US 1	1993-	1670	35	1	A2 1	9931	216
									1	WO I	1995-	US33	85	1	W 1	9950	313

ED Entered STN: 22 Dec 1995

A novel expression cloning method for the detection, identification and AB purification of proteins that bind a tyrosine-phosphorylated domain of a eukaryotic tyrosine kinase uses novel peptides with an amino acid sequence corresponding to a portion of a tyrosine-phosphorylated domain of a tyrosine kinase as ligands for detection of the protein. The probe has at least one phosphorylated tyrosine residue and may be detectably labeled. The kinase is preferably identified from proteins manufactured in an expression host that does not have endogenous tyrosine kinase activity, such as Escherichia coli and cell lysates are screened for binding activity. In one version, the probe is used to screen an expression library immobilized on hybridization vectors. A method for preparing the probe, a method for mapping the gene for the binding protein to a chromosome, and a method for purifying such a protein with the probe are also described. Novel proteins, GRB-1, GRB-2, GRB-3, GRB-4 and GRB-7, that show affinity for kinase recognition domains such as the Cterminal domain of EGFR and SH2 and SH3 domains are identified and cDNAs encoding them are cloned. Genes for these proteins, and methods for detecting these proteins are also described.

IT 171941-69-3, Protein GRB 2 (human clone 10-53)

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)

(amino acid sequence; affinity-based expression cloning method for identifying eukaryotic tyrosine kinases and novel target proteins)

L38 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1985:50888 CAPLUS Full-text

DOCUMENT NUMBER:

102:50888

TITLE:

Synthetic heat-stable enterotoxin polypeptide of

Escherichia coli and multimers thereof

INVENTOR(S):

Houghten, Richard A.

PATENT ASSIGNEE(S):

Scripps Clinic and Research Foundation, USA

SOURCE: PCT Int. Appl., 177 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8402700	A1	19840719	WO 1983-US2008	19831221
W: AU, DK, FI,	JP, KP	, NO		
US 4545931	Α	19851008	US 1983-455265	19830103
US 4886663	Α	19891212	US 1983-559469	19831212

	8424368					AU 1984-24368		19831221
AU	572821			B2	19880519			
ZA	8309512			Α	19840829			19831221
JP	60501360							19831221
EP	117367			A1	19840905	EP 1983-308009		19831223
EP	117367			В1	19890104			
	R: AT,	BE,	CH,	DE,		LI, LU, NL, SE		
AT	39700			E		AT 1983-308009		19831223
ΙL	70601			A1	19880930	IL 1984-70601		19840102
ES	528649			A1	19850501	ES 1984-528649		19840103
NO	8403464			Α	19840831	NO 1984-3464		19840831
DK	8404215			Α	19840903	DK 1984-4215		19840903
FI	8403451			Α	19840903	FI 1984-3451		
WO	8502611			A1	19850620	WO 1984-US2030		19841212
	W: AU,	DK,	FI,	JΡ,	KR, NO, US,	US		
					FR, GB, LU,			
						AU 1985-37471		
						EP 1985-900404		19841212
						LU, NL, SE		
JP	61500664			T2	19860410	JP 1985-500071		19841212
DK	8503646			Α	19850809	DK 1985-3646		19850809
	8503153			Α	19850913	NO 1985-3153		19850809
FI						FI 1985-3082		19850812
US	4758655			A	19880719	US 1987-71606		19870709
PRIORITY	APPLN.	INFO	. :			US 1983-455265	Α	19830103
						US 1983-559469	Α	19831212
						WO 1983-US2008	Α	19831221
						EP 1983-308009	Α	19831223
						WO 1984-US2030	Α	
						US 1985-760753	A1	19850722

ED Entered STN: 09 Feb 1985

AΒ A synthetic polypeptide having ≥10% of the immunol. activity of biol. heatstable enterotoxin (ST) of E. coli includes ≥14 amino acids represented by Cys-Cys-Glu-Leu-Cys-Cys-/Tyr-(Asn)-Pro-Ala-Cys-Ala- (Thr)-Gly-Cys-Asn(Tyr) where the amino acid in parentheses may replace the immediately preceding amino acid residue and at least 1 intramol. disulfide bond formed between the Cys residues. The polypeptides can be monomeric or polymer containing an intramol., intrapolypeptide and(or) an intramol., intrapolypeptide cystine disulfide bond. A 1st polypeptide having the 18 residue sequence of ST Ib, Asn-Thr-Phe-Tyr-Cys-Cys-Glu-Leu- Cys-Cys-Tyr-Pro-Ala-cys-Ala-Gly-Cys-Asn [89091-07-6] was prepared by Merrifield synthesis. This was added with gentle agitation to aqueous 0.1M (NH4)2CO3 solution, and then subjected to oxidation with air to oxidize the 6 Cys residues and form 3 intramol. intrapolypeptide cystine disulfide bonds. The resulting oxidized polypeptide [94388-50-8] was collected by lyophilization. Substantial immunol. activity was shown by this peptide. Differences were shown between the synthetic peptide and natural peptides. Synthetic ST was also conjugated to LT (heat-labile) holotoxin. Vaccines were prepared and tested.

IT 89091-07-6P 94388-50-8P 94396-21-1DP, oxidized 94396-21-1P

RL: PREP (Preparation)

(preparation of, as synthetic heat-stable enterotoxin)

L38 ANSWER 11 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:180356 TOXCENTER Full-text

COPYRIGHT:

Copyright 2006 ACS

DOCUMENT NUMBER:

CA12510123681E

TITLE: Immunogens for stimulating mucosal immunity constructed

from foreign antigens inserted into cholera toxin subunits

AUTHOR(S): Lebens, Michael Richard; Holmgren, Jan Roland

PATENT INFORMATION: WO 9616178 A1 30 May 1996

SOURCE: (1996) PCT Int. Appl., 64 pp.

CODEN: PIXXD2.

COUNTRY: SWEDEN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1996:452465

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20020730

## ABSTRACT:

Immunogens are described for stimulating mucosal immunity to a pathogen capable of infecting its host through contact with mammalian mucosal membranes. In particular, a number of polypeptides and genetic constructs are described that include a membrane binding polypeptide operably linked to a peptide from a pathogen. Methods are detailed and the specification for introducing these immunogens into a mammal to stimulate mucosal immune responses. Thus, the mucosal binding protein may comprise the binding subunit or the CTA(2) subunit of cholera toxin which is linked to pathogen antigens such as (1) the B-cell stimulating or T-helper cell-stimulating antigens from the major outer membrane protein of Chlamydia trachomatis, (2) an antigen from the gp120 glycoprotein of HIV virus, (3) the hepatitis B virus pre-S(2) protein, or (4) the STa protein of enterotoxigenic Escherichia coli. The cholera toxin subunit B (CTB)::foreign antigen hybrids retain all of the important characteristics of native CTB, such as folding, pentamerization, extracellular secretion when produced in Vibrio cholerae, and GM1 binding; many of them were resistant to cleavage by V. cholerae proteases; and they were were reactive with monoclonal directed against the foreign antigen, indicating that \*\*\*antibody\*\*\* substitution of an antigenic peptide in the region of the native mol. produces a construct with foreign antigen that is accessible to the immune system of its host.

CLASSIFICATION CODE: 63-3

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

immunogen mucosal pathogen antigen cholera toxin; vaccination mucosal immunogen antigen cholera toxin

REGISTRY NUMBER: 129279-60-3Q (fusion products with cholera toxin

subunit B)

148618-20-6Q (crosslinked with cholera toxin subunit B)

148618-20-6Q (fusion products with cholera toxin

subunit B)

153238-98-3Q (fusion products with cholera toxin

subunit B)

179036-55-6Q (fusion products with cholera toxin

subunit B)

179036-56-7Q (fusion products with cholera toxin

subunit B)

179157-07-4Q (crosslinked with cholera toxin subunit B) 179157-08-50 (crosslinked with cholera toxin subunit B)

135409-33-5Q (fusion products with cholera toxin

subunit B)

145146-53-8Q (fusion products with cholera toxin

subunit B)

179036-53-4Q (fusion products with cholera toxin

subunit B)

179036-54-5Q (fusion products with cholera toxin

subunit B)

85456-43-5Q (fusion products with cholera toxin

subunit B)

118943-17-2Q (fusion products with cholera toxin

subunit B)

106019-64-1Q (fusion products with cholera toxin

subunit B)

L38 ANSWER 12 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:189194 TOXCENTER Full-text

COPYRIGHT: Copyright 2006 ACS DOCUMENT NUMBER: CA12310123129Q

TITLE: Compositions containing heat-stable toxin

conjugates that specifically bind to colorectal

cancer cells and methods for their use

AUTHOR(S): Waldman, Scott A.

CORPORATE SOURCE: ASSIGNEE: Thomas Jefferson University

PATENT INFORMATION: WO 9511694 A1 4 May 1995

SOURCE: (1995) PCT Int. Appl., 132 pp.

CODEN: PIXXD2.

COUNTRY: UNITED STATES

DOCUMENT TYPE: Patent FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1995:735479

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20020903

# ABSTRACT:

Conjugated compds. which comprise an heat-stable toxin (ST) receptor binding moiety and a radiostable active moiety are disclosed. Pharmaceutical compns. comprising conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding moiety and a radioactive active moiety are disclosed. The ST receptor binding moiety can be any of 52 peptide portions of heat-stable toxins (E. coli ST Ia, ST Ib, guanylin, etc.), and the active moiety can be various drugs (methotrexate, etoposide), toxins (ricin A chain, diphtheria toxin), or radionuclides (47Sc, 32P, etc.). Methods of treating an individual suspected of suffering from metastasized colorectal cancer are disclosed. Methods of radioimaging metastasized colorectal cancer cells are disclosed. In vitro methods, kits, and reagents are disclosed for determining whether or not an individual has metastasized colorectal cancer cells, for determining whether tumor cells are colorectal in origin, and for analyzing tissue samples from the colon tissue to evaluate the extent of metastasis of colorectal tumor cells.

CLASSIFICATION CODE: 63-3

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

colorectal cancer metastasis diagnosis treatment;
radioimaging colorectal cancer metastasis; heat stable

toxin colorectal cancer metastasis

REGISTRY NUMBER: 9001-86-9Q (Phospholipase C, conjugates with

heat-stable toxin peptides)

9001-99-4Q (RNase, conjugates with heat-stable

toxin peptides)

50-18-0Q (Cyclophosphamide, conjugates with

heat-stable toxin peptides)

51-21-8Q (5-Fluorouracil, conjugates with

heat-stable toxin peptides)

59-05-2Q (Methotrexate, conjugates with

heat-stable toxin peptides)

68-76-8Q (Trenimon, conjugates with heat-stable

toxin peptides)

106-51-4Q (1,4-Benzoquinone, derivs., conjugates

with heat-stable toxin peptides)

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147-94-4Q (Cytosine arabinoside, conjugates with
heat-stable toxin peptides)
148-82-3Q (Melphalan, conjugates with
heat-stable toxin peptides)
305-03-3Q (Chlorambucil, conjugates with
heat-stable toxin peptides)
443-48-1Q (Metronidazole, conjugates with
heat-stable toxin peptides)
1404-00-8Q (Mitomycin, conjugates with
heat-stable toxin peptides)
9001-78-90 (conjugates with heat-stable toxin
peptides)
10043-66-0Q (Iodine-131, conjugates with
heat-stable toxin peptides)
10098-91-6Q (Yttrium-90, conjugates with
heat-stable toxin peptides)
11056-06-7Q (Bleomycin, conjugates with
heat-stable toxin peptides)
12634-34-3Q (Macromomycin, conjugates with
heat-stable toxin peptides)
13551-87-6Q (Misonidazole, conjugates with
heat-stable toxin peptides)
13981-50-5Q (Cobalt-57, conjugates with
heat-stable toxin peptides)
13981-51-6Q (Mercury-197, conjugates with
heat-stable toxin peptides)
14093-04-0Q (Iron-52, conjugates with
heat-stable toxin peptides)
14119-09-6Q (Gallium-67, conjugates with
heat-stable toxin peptides)
14119-24-5Q (Osmium-191, conjugates with
heat-stable toxin peptides)
14158-31-7Q (Iodine-125, conjugates with
heat-stable toxin peptides)
14265-75-9Q (Lu-177, conjugates with heat-stable
toxin peptides)
14374-81-3Q (Germanium-71, conjugates with
heat-stable toxin peptides)
14378-26-8Q (Rhenium-188, conjugates with
heat-stable toxin peptides)
14391-11-8Q (Gold-199, conjugates with
heat-stable toxin peptides)
14391-19-6Q (Terbium-161, conjugates with
heat-stable toxin peptides)
14391-96-9Q (Scandium-47, conjugates with
heat-stable toxin peptides)
14596-37-3Q (Phosphorus-32, conjugates with
heat-stable toxin peptides)
14683-06-8Q (Tin-121, conjugates with
heat-stable toxin peptides)
14683-16-0Q (Iodine-132, conjugates with
heat-stable toxin peptides)
14687-25-3Q (Lead-203, conjugates with
heat-stable toxin peptides)
14687-61-7Q (Arsenic-77, conjugates with
heat-stable toxin peptides)
14903-02-7Q (Potassium-43, conjugates with
heat-stable toxin peptides)
14913-49-6Q (Bismuth-212, conjugates with
heat-stable toxin peptides)
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14913-89-40 (conjugates with heat-stable toxin
peptides)
14914-68-2Q (Antimony-119, conjugates with
heat-stable toxin peptides)
14914-76-2Q (Cesium-131, conjugates with
heat-stable toxin peptides)
14967-68-1Q (Palladium-103, conjugates with
heat-stable toxin peptides)
14981-64-7Q (Palladium-109, conjugates with
heat-stable toxin peptides)
14981-79-40 (Praseodymium-143, conjugates with
heat-stable toxin peptides)
14998-63-1Q (Rhenium-186, conjugates with
heat-stable toxin peptides)
15047-05-9Q (Cesium-129, conjugates with
heat-stable toxin peptides)
15092-94-10 (Lead-212, conjugates with
heat-stable toxin peptides)
15663-27-1Q (cis-Platinum, conjugates with
heat-stable toxin peptides)
15715-08-9Q (Iodine-123, conjugates with
heat-stable toxin peptides)
15720-35-1Q (Cesium-127, conjugates with
heat-stable toxin peptides)
15749-66-3Q (Phosphorus-33, conjugates with
heat-stable toxin peptides)
15750-15-90 (Indium-111, conjugates with
heat-stable toxin peptides)
15755-39-2Q (Astatine-211, conjugates with
heat-stable toxin peptides)
15757-14-90 (Gallium-68, conjugates with
heat-stable toxin peptides)
15757-86-5Q (Copper-67, conjugates with
heat-stable toxin peptides)
15760-04-0Q (Silver-111, conjugates with
heat-stable toxin peptides)
15765-39-60 (Bromine-77, conjugates with
heat-stable toxin peptides)
15776-19-9Q (Bismuth-206, conjugates with
heat-stable toxin peptides)
18268-34-3Q (Rubidium-81, conjugates with
heat-stable toxin peptides)
20830-81-3Q (Daunorubicin, conjugates with
heat-stable toxin peptides)
23214-92-8Q (Doxorubicin, conjugates with
heat-stable toxin peptides)
33419-42-0Q (Etoposide, conjugates with
heat-stable toxin peptides)
36877-68-6Q (Nitroimidazole, conjugates with
heat-stable toxin peptides)
53643-48-4Q (Vindesine, conjugates with
heat-stable toxin peptides)
65988-88-7Q (Modeccin, conjugates with
heat-stable toxin peptides)
75037-46-6Q (Gelonin, conjugates with
heat-stable toxin peptides)
  79153-26-7Q (conjugates)
  86825-60-7Q (conjugates)
  89091-07-6Q (conjugates)
91933-11-8Q (Volkensin, conjugates with
```

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heat-stable toxin peptides)
  92465-93-5Q (conjugates)
  92465-94-6Q (conjugates)
  95260-78-9Q (conjugates)
  95260-79-0Q (conjugates)
  95260-80-3Q (conjugates)
  95260-81-4Q (conjugates)
  96107-39-0Q (conjugates)
  96107-40-3Q (conjugates)
  96107-41-4Q (conjugates)
  96107-42-5Q (conjugates)
  96107-43-6Q (conjugates)
  96121-87-8Q (conjugates)
  99237-32-8Q (conjugates)
105892-70-4Q (conjugates)
105892-72-6Q (conjugates)
105892-73-7Q (conjugates)
140653-38-9Q (Guanylin (rat reduced), conjugates
145319-90-0Q (Guanylin (human reduced), conjugates
  166313-08-2Q (conjugates)
  166313-09-3Q (conjugates)
  166313-10-6Q (conjugates)
  166313-11-7Q (conjugates)
  166313-12-8Q (conjugates)
  166313-13-9Q (conjugates)
  166313-14-0Q (conjugates)
  166313-15-1Q (conjugates)
  166313-16-2Q (conjugates)
  166313-17-3Q (conjugates)
  166313-18-4Q (conjugates)
  166313-19-5Q (conjugates)
  166313-20-8Q (conjugates)
  166313-21-9Q (conjugates)
  166313-22-0Q (conjugates)
  166313-23-1Q (conjugates)
  166313-24-2Q (conjugates)
  166313-25-3Q (conjugates)
  166313-26-4Q (conjugates)
  166313-27-5Q (conjugates)
  166313-28-6Q (conjugates)
166313-29-7Q (conjugates)
166313-30-0Q (conjugates)
166313-31-1Q (conjugates)
  166313-32-2Q (conjugates)
166313-33-3Q (conjugates)
  166313-34-4Q (radioactive iodine-labeled, conjugates
with heat-stable toxin peptides)
  166313-35-5Q (radioactive iodine-labeled, conjugates
with heat-stable toxin peptides)
  166313-36-6Q (radioactive iodine-labeled, conjugates
with heat-stable toxin peptides)
  166313-37-7Q (conjugates with heat-stable toxin
peptides)
  166313-38-8Q (conjugates with heat-stable toxin
peptides)
60-00-4 (EDTA)
68528-80-3 (Disuccinimidyl suberate)
13982-64-4Q (Strontium-87, conjugates with
```

heat-stable toxin peptides)

14133-76-7Q (Technetium-99, conjugates with

heat-stable toxin peptides)

14885-78-00 (Indium-113, conjugates with

heat-stable toxin peptides)

15678-91-8Q (Krypton-81, conjugates with

heat-stable toxin peptides)

15735-70-3Q (Platinum-193, conjugates with

6539-14-6; 57757-57-0; 68181-17-9; 103708-09-4;

heat-stable toxin peptides)

151199-81-4

L38 ANSWER 13 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

REGISTRY NUMBER:

1992:146544 TOXCENTER Full-text

COPYRIGHT:

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DOCUMENT NUMBER:

CA11703021679C

TITLE:

High-level expression and secretion of a lysine-containing

analog of Escherichia coli heat-stable enterotoxin

AUTHOR (S):

Greenberg, Richard N.; Ping, Zhu; Biek, Donald P.; Mann,

Dennis M.

CORPORATE SOURCE:

Dep. Med., Univ. Kentucky, Lexington, KY, 40536, USA. Protein Expression and Purification, (1991) Vol. 2, No.

5-6, pp. 394-401.

CODEN: PEXPEJ. ISSN: 1046-5928.

COUNTRY:

SOURCE:

UNITED STATES

DOCUMENT TYPE:

Journal

FILE SEGMENT: OTHER SOURCE:

CAPLUS CAPLUS 1992:421679

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20020924

# ABSTRACT:

A method for obtaining large amts. of a biol. active lysine-containing analog of E. coli STa was described. Initial attempts to express the toxin using an expression vector that did not encode a signal sequence resulted in no biol. active material being recovered either from lysed cells or as a secretory product. However, use of the secretion vector pJAL36, which contains the STII enterotoxin signal sequence, allowed large amts. of an STa derivative containing the

addnl. sequence Ser-Thr-Lys at the amino terminus of the mature enterotoxin to be readily purified from culture supernatants. This enterotoxin analog, known as KSTa-1, was equal in biol. and receptor binding activity to the native toxin STa. The lysine residue present in KSTa-1 promises to be useful as a reactive amino acid that is readily derivatized to allow coupling of the enterotoxin to supports for affinity chromatog. and antigenic conjugates. Addnl., the insertion of the lysine residue carboxy terminal to the Ser-Thr sequence

adds a reversible handle to the toxin sequence in that the Ser-Thr-Lys segment can be removed by treatment with trypsin, releasing the native form of STa.

CLASSIFICATION CODE: 4-5

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

Escherichia heat stable enterotoxin expression secretion; lysine analog Escherichia enterotoxin expression secretion

REGISTRY NUMBER:

56-87-1 (Lysine)

REGISTRY NUMBER:

138976-83-7

L38 ANSWER 14 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:129196 TOXCENTER Full-text

COPYRIGHT:

Copyright 2006 ACS

DOCUMENT NUMBER:

CA11019169870J

TITLE:

Citrobacter freundii produces an 18-amino-acid heat-stable

enterotoxin identical to the 18-amino-acid Escherichia

coli heat-stable enterotoxin (ST Ia)

Guarino, Alfredo; Giannella, Ralph; Thompson, Michael R. AUTHOR (S):

Coll. Med., Univ. Cincinnati, Cincinnati, OH, 45267, USA. CORPORATE SOURCE:

Infection and Immunity, (1989) Vol. 57, No. 2, pp. 649-52. SOURCE:

CODEN: INFIBR. ISSN: 0019-9567.

UNITED STATES COUNTRY:

DOCUMENT TYPE: Journal CAPLUS FILE SEGMENT:

OTHER SOURCE: CAPLUS 1989:169870

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021029

#### ABSTRACT:

The heat-stable enterotoxin produced by C. freundii was purified and sequenced. The toxin was detected during purification by reaction with monoclonal to E. coli heat-stable enterotoxin. The C. freundii toxin amino acid sequence was identical to that of the 18-amino-acid heat-stable enterotoxin (STa) produced by toxigenic E. coli.

CLASSIFICATION CODE: 10-1

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

Citrobacter enterotoxin characterization

79153-26-7 REGISTRY NUMBER:

L38 ANSWER 15 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:161147 TOXCENTER Full-text

COPYRIGHT: DOCUMENT NUMBER:

Copyright 2006 ACS CA11125226092D

TITLE:

Rectification of two Escherichia coli heat-stable

enterotoxin allele sequences and lack of biological effect

of changing the carboxy-terminal tyrosine to histidine

Guzman-Verduzco, Luz Maria; Kupersztoch, Yankel M. AUTHOR(S):

Southwest. Med. Cent., Univ. Texas, Dallas, TX, 75235, CORPORATE SOURCE:

Infection and Immunity, (1989) Vol. 57, No. 2, pp. 645-8. SOURCE:

CODEN: INFIBR. ISSN: 0019-9567.

UNITED STATES COUNTRY:

Journal DOCUMENT TYPE:

CAPLUS FILE SEGMENT:

CAPLUS 1989:626092 OTHER SOURCE:

English LANGUAGE:

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021022

# ABSTRACT:

Resequencing estA3, an allele of the methanol-soluble heat-stable enterotoxin of E. coli showed that the proline triplet 19 is in fact an alanine codon; thus, estA alleles 3 and 4 were shown to be identical. Resequencing has also shown that the carboxy terminus of another allele, estA2, is not the previously inferred histidine triplet but the same tyrosine codon reported for all other estA alleles. The improperly inferred histidine codon was used in constructions to fuse estA2 to the B subunit of the heat-labile enterotoxin gene, and the fused gene products as well as three amino acid insertional mutants containing histidine-72 were not efficiently secreted. defective secretion was due to histidine as a carboxy-terminal residue, since site-directed mutagenesis of wild-type tyrosine-72 to histidine did not influence the localization of the activity of the methanol-soluble heat-stable enterotoxin.

CLASSIFICATION CODE: 3-2

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

Escherichia heat stable enterotoxin gene sequence;

enterotoxin STA Escherichia mutation secretion

REGISTRY NUMBER: 123608-30-0 (Deoxyribonucleic acid (Escherichia coli clone

pRIT10250 gene estA2))

85305-59-5 (Deoxyribonucleic acid (Escherichia coli

heat-stable enterotoxin Ib gene))

REGISTRY NUMBER: 85306-53-2; 85456-43-5;

123607-93-2; 123607-95-4;

123608-02-6

L38 ANSWER 16 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:104094 TOXCENTER Full-text

COPYRIGHT: Copyright 2006 ACS DOCUMENT NUMBER: CA10206050888R

TITLE: Synthetic heat-stable enterotoxin polypeptide of

Escherichia coli and multimers thereof

AUTHOR(S): Houghten, Richard A.

CORPORATE SOURCE: ASSIGNEE: Scripps Clinic and Research Foundation

PATENT INFORMATION: WO 842700 Al 19 Jul 1984

SOURCE: (1984) PCT Int. Appl., 177 pp.

CODEN: PIXXD2.

COUNTRY: UNITED STATES

DOCUMENT TYPE: Patent FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1985:50888

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021112

## ABSTRACT:

A synthetic polypeptide having ≥10% of the immunol. activity of biol. heat-stable enterotoxin (ST) of E. coli includes ≥14 amino acids represented by Cys-Cys-Glu-Leu-Cys-Cys-/Tyr-(Asn)-Pro-Ala-Cys-Ala-(Thr)-Gly-Cys-Asn(Tyr) where the amino acid in parentheses may replace the immediately preceding amino acid residue and at least 1 intramol. disulfide bond formed between the Cys residues. The polypeptides can be monomeric or polymer containing an intramol., intrapolypeptide and(or) an intramol., intrapolypeptide cystine disulfide bond. A 1st polypeptide having the 18 residue sequence of ST Ib, Asn-Thr-Phe-Tyr-Cys-Cys-Glu-Leu-Cys-Cys-Tyr-Pro-Ala-cys-Ala-Gly-Cys-Asn [ \*\*\*89091-07-6\*\*\* ] was prepared by Merrifield synthesis. This was added with gentle agitation to aqueous 0.1M (NH4)2CO3 solution, and then subjected to oxidation with

air to oxidize the 6 Cys residues and form 3 intramol. intrapolypeptide cystine disulfide bonds. The resulting oxidized polypeptide [94388-50-8] was collected by lyophilization. Substantial immunol. activity was shown by this peptide. Differences were shown between the synthetic peptide and natural peptides. Synthetic ST was also conjugated to LT (heat-labile) holotoxin. Vaccines were prepared and tested.

CLASSIFICATION CODE: 63-3

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

enterotoxin polypeptide; vaccine enterotoxin polypeptide; Escherichia enterotoxin polypeptide; antigen enterotoxin

polypeptide

REGISTRY NUMBER: 94396-21-1Q (oxidized)
REGISTRY NUMBER: 89091-07-6; 94388-50-8;

94396-21-1

L38 ANSWER 17 OF 32 TOXCENTER COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:99118 TOXCENTER Full-text

COPYRIGHT: Copyright 2006 ACS DOCUMENT NUMBER: CA10201001667J

TITLE: Isolation and characterization of the heat-stable

enterotoxin from a pathogenic bovine strain of Escherichia

coli

AUTHOR(S): Gerday, Charles; Herman, Marianne; Olivy, Jacques;

Gerardin-Otthiers, Nicole; Art, Dominique; Jacquemin,

Etienne; Kaeckenbeeck, Albert; Van Beeumen, Jozef

CORPORATE SOURCE:

Inst. Chim., Univ. Liege, Liege, 4000, Belg...

SOURCE:

Veterinary Microbiology, (1984) Vol. 9, No. 4, pp.

399-414.

CODEN: VMICDQ. ISSN: 0378-1135.

COUNTRY:

BELGIUM Journal

DOCUMENT TYPE: FILE SEGMENT:

CAPLUS

OTHER SOURCE:

CAPLUS 1985:1667

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20021112

### ABSTRACT:

A heat-stable enterotoxin secreted by a pathogenic strain of E. coli of calf origin was purified to homogeneity by a procedure involving acetone fractionation, DEAE cellulose chromatog., Biogel P2 chromatog., and size exclusion HPLC. The purity of the product was ascertained by amino acid analyses and sequence using manual degradation with 4-(N,N-dimethylamino) azobenzene-

4'-isothiocyanate (DABITC) and an automatic gas phase sequenator. The following amino acid sequence is proposed: Asn-Thr-Phe-Tyr-Cys-Cys-Glu-Leu-Cys-Cys-Asn-Pro-Ala-Cys-Ala-Gly-Cys-Tyr. It is identical to a similar active peptide isolated from strains of porcine origin. Antibodies to ST were successfully produced in rabbits using a conjugate with bovine serum albumin. The UV absorption and CD spectra of the active product were recorded and discussed.

CLASSIFICATION CODE: 4-5

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

Escherichia enterotoxin isolation characterization

REGISTRY NUMBER: 79153-26-7

L38 ANSWER 18 OF 32 USPATFULL on STN

ACCESSION NUMBER:

2001:208665 USPATFULL Full-text

TITLE:

Polynucleotide encoding human sodium dependent

phosphate transporter (IPT-1)

INVENTOR(S):

Feild, John, Wayne, PA, United States

PATENT ASSIGNEE(S):

SmithKline Beecham Corporation, Philadelphia, PA,

United States (U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION:

US 1997-44974P 19970428 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Pak, Michael

LEGAL REPRESENTATIVE: Han, William T.Ratner & Prestia, King, William T.

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1 LINE COUNT: 993

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IPT-1 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. Also disclosed are methods for utilizing IPT-1 polypeptides and polynucleotides in the design of protocols for the treatment of chronic renal failure, end stage renal disease, uremic bone disease, and cancer, among others, and diagnostic assays for such conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

215373-30-1P

(amino acid sequence; cloning and cDNA sequence of a human sodium-dependent phosphate transporter IPT-1)

L38 ANSWER 19 OF 32 USPATFULL on STN

2000:57333 USPATFULL Full-text ACCESSION NUMBER:

Compositions that specifically bind to colorectal TITLE:

cancer cells and methods of using the same

Waldman, Scott A., Ardmore, PA, United States INVENTOR(S):

Thomas Jefferson University, Philadelphia, PA, United PATENT ASSIGNEE(S):

States (U.S. corporation)

NUMBER KIND DATE US 6060037 20000509 WO 9511694 19950504 PATENT INFORMATION: 19950504 WO 9511054 US 1996-635930 19960426 (8) WO 1994-US12232 19941026 APPLICATION INFO.: 19960426 PCT 371 date 19960426 PCT 102(e) date

Continuation-in-part of Ser. No. US 1993-141892, filed RELATED APPLN. INFO.:

on 26 Oct 1993, now patented, Pat. No. US 5518888 And a continuation-in-part of Ser. No. US 1994-305056, filed

on 13 Sep 1994, now patented, Pat. No. US 5601990

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Brusca, John S. ASSISTANT EXAMINER: Larson, Thomas G.

LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris LLP

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 4473

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Conjugated compounds which comprise an ST receptor binding moiety and a radiostable active moiety are disclosed. Pharmaceutical compositions comprising conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding moiety and a radioactive active moiety are disclosed. Methods of treating an individual suspected of suffering from metastasized colorectal cancer are disclosed. Methods of radioimaging metastasized colorectal cancer cells are disclosed. In vitro methods, kits and reagents are disclosed for determining whether or not an individual has metastasized colorectal cancer cells, for determining whether tumor cells are colorectal in origin and for analyzing tissue samples from the colon tissue to evaluate the extent of metastasis of colorectal tumor cells.

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, radioisotope conjugates 89091-07-6D, radioisotope
      conjugates 92465-93-5D, radioisotope conjugates
      92465-94-6D, radioisotope conjugates
      95260-78-9D, radioisotope conjugates
      95260-79-0D, radioisotope conjugates
      95260-80-3D, radioisotope conjugates
      95260-81-4D, radioisotope conjugates
      96107-39-0D, radioisotope conjugates
      96107-40-3D, radioisotope conjugates
      96107-41-4D, radioisotope conjugates
      96107-42-5D, radioisotope conjugates
      96107-43-6D, radioisotope conjugates
      96121-87-8D, radioisotope conjugates
      99237-32-8D, radioisotope conjugates
      166313-08-2D, radioisotope conjugates
      166313-09-3D, radioisotope conjugates
      166313-10-6D, radioisotope conjugates
      166313-11-7D, radioisotope conjugates
      166313-12-8D, radioisotope conjugates
      166313-13-9D, radioisotope conjugates
      166313-14-0D, radioisotope conjugates
      166313-15-1D, radioisotope conjugates
      166313-16-2D, radioisotope conjugates
      166313-17-3D, radioisotope conjugates
      166313-18-4D, radioisotope conjugates
      166313-19-5D, radioisotope conjugates
      166313-20-8D, radioisotope conjugates
      166313-21-9D, radioisotope conjugates
      166313-22-0D, radioisotope conjugates
      166313-23-1D, radioisotope conjugates
      166313-24-2D, radioisotope conjugates
      166313-25-3D, radioisotope conjugates
      166313-26-4D, radioisotope conjugates
      166313-27-5D, radioisotope conjugates
      166313-32-2D, radioisotope conjugates
        (ST receptor-binding compns. that specifically bind to colorectal
        cancer cells for radioimaging and diagnosis of metastasis)
L38 ANSWER 20 OF 32 USPATFULL on STN
                       2000:50521 USPATFULL Full-text
ACCESSION NUMBER:
TITLE:
                       Methods of using synthetic molecules and target
                       sequences
INVENTOR(S):
                       Tsien, Roger Y., La Jolla, CA, United States
                       Griffin, B. Albert, Del Mar, CA, United States
PATENT ASSIGNEE(S):
                       The Regents of the University of California, La Jolla,
                       CA, United States (U.S. corporation)
                            NUMBER
                                     KIND DATE
                       US 6054271
PATENT INFORMATION:
                                              20000425
APPLICATION INFO.:
                       US 1997-955050
                                             19971021 (8)
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       Granted
PRIMARY EXAMINER:
                       Ceperley, Mary E.
LEGAL REPRESENTATIVE:
                       Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.
NUMBER OF CLAIMS:
                       20
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                       12 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT:
                       1417
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention features biarsenical molecules and target sequences that specifically react with the biarsenical molecules. Methods of using the biarsenical molecules, tetraarsenical molecules and the target sequences are included.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 223673-78-7

(SEQ ID 1; target protein sequences for binding of synthetic biarsenical mols.)

IT 223673-79-8

(SEQ ID 4; target protein sequences for binding of synthetic biarsenical mols.)

L38 ANSWER 21 OF 32 USPATFULL on STN

ACCESSION NUMBER: 1999:170770 USPATFULL Full-text

TITLE: Synthetic molecules that specifically react with target

sequences

INVENTOR(S): Tsien, Roger Y., La Jolla, CA, United States

Griffin, B. Albert, Del Mar, CA, United States

PATENT ASSIGNEE(S): The Regents of the University of California, Oakland,

CA, United States (U.S. corporation)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Owens, Amelia

LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.

NUMBER OF CLAIMS: 39 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 1409

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention features biarsenical molecules. Target sequences that specifically react with the biarsenical molecules are also included. The present invention also features kits that include biarsenical molecules and target sequences. Tetraarsenical molecules are also featured in the

invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 223673-78-7

(SEQ ID 1; target protein sequences for binding of synthetic biarsenical mols.)

IT 223673-79-8

(SEQ ID 4; target protein sequences for binding of synthetic biarsenical mols.)

L38 ANSWER 22 OF 32 USPATFULL on STN

ACCESSION NUMBER: 1999:121123 USPATFULL Full-text

TITLE: Compositions that specifically bind to colorectal cells

and methods of using the same

INVENTOR(S): Waldman, Scott A., Ardmore, PA, United States

PATENT ASSIGNEE(S): Thomas Jefferson University, Philadelphia, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5962220 19991005 APPLICATION INFO.: US 1995-467920 19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-141892, filed

on 26 Oct 1993, now patented, Pat. No. US 5518888

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Houtteman, Scott W.

LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris, LLP

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: 1 LINE COUNT: 1515

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Conjugated compounds that comprise an ST receptor binding moiety and an active moiety that is an antisense molecule are disclosed. Pharmaceutical compositions which comprise comjugated compounds that comprise an ST receptor binding moiety and an active moiety that is an antisense molecule are disclosed including pharmaceutical compositions that have enteric formulations. Methods of treating an individual suspected of suffering from colorectal cancer and methods of preventing colorectal cancer are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

79153-26-7 86825-60-7 89091-07-6

92465-93-5 92465-94-6 95260-78-9

95260-79-0 95260-80-3 95260-81-4

96107-39-0 96107-40-3 96107-41-4

96107-42-5 96107-43-6 96121-87-8

99237-32-8 166313-08-2 166313-09-3

166313-10-6 166313-11-7 166313-12-8

166313-13-9 166313-14-0 166313-15-1 166313-16-2 166313-17-3 166313-18-4

166313-19-5 166313-20-8 166313-21-9

166313-22-0 166313-23-1 166313-24-2

166313-25-3 166313-26-4 166313-27-5

166313-32-2

(ST receptor-binding that specifically bind to colorectal cells and methods of using the same)

L38 ANSWER 23 OF 32 USPATFULL on STN

1999:89051 USPATFULL Full-text ACCESSION NUMBER:

Target sequences for synthetic molecules TITLE:

INVENTOR(S): Tsien, Roger Y., La Jolla, CA, United States

Griffin, B. Albert, Del Mar, CA, United States

PATENT ASSIGNEE(S): The Regents of the University of California, Oakland,

CA, United States (U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 5932474 19990803

US 1997-955206 19971021 (8) APPLICATION INFO.: DOCUMENT TYPE:

Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Ketter, Jame ASSISTANT EXAMINER: Yucel, Irem Ketter, James

LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 1331 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention features biarsenical molecules and target sequences that specifically react with the biarsenical molecules. Bonding partners that include target sequences, vectors that include nucleic acid sequences that encode the target sequences and host cells that include the target sequences are also featured in the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 223673-78-7

(SEQ ID 1; target protein sequences for binding of synthetic biarsenical mols.)

IT 223673-79-8

(SEQ ID 4; target protein sequences for binding of synthetic biarsenical mols.)

L38 ANSWER 24 OF 32 USPATFULL on STN

ACCESSION NUMBER:

1999:30346 USPATFULL Full-text

TITLE:

Methods of treating metastatic colorectal cancer with

ST receptor binding compounds

INVENTOR(S):

Waldman, Scott A., Ardmore, PA, United States

PATENT ASSIGNEE(S):

Thomas Jefferson University, Philadelphia, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 5879656 19990309 US 1996-583447 19960105 (8)

APPLICATION INFO.: RELATED APPLN. INFO.:

US 1996-583447 19960105 (8) Continuation-in-part of Ser. No. US 1993-141892, filed

on 26 Oct 1993, now patented, Pat. No. US 5518888,

issued on 21 May 1996

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Green, Lora M.

ASSISTANT EXAMINER:

Ricigliano, Joseph W.

LEGAL REPRESENTATIVE:

Kicigilano, boseph w.

NUMBER OF CLAIMS:

Woodcock Washburn Kurtz Mackiewicz & Norris, LLP

EXEMPLARY CLAIM:

58

LINE COUNT:

3900

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Conjugated compounds which comprises an ST receptor binding moiety and a AB radiostable active moiety are disclosed. Pharmaceutical compositions comprising a pharmaceutically acceptable carrier or diluent, and a conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding moiety and a radioactive active moiety are disclosed. Methods of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent, and a therapeutically effective amount of a conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding moiety and a radiostable active moiety are disclosed. Methods of radioimaging metastasized colorectal cancer cells comprising the steps of first administering to an individual suspected of having metastasized colorectal cancer cells, a pharmaceutical composition that comprises a pharmaceutically acceptable carrier or diluent, and conjugated compound that comprises an ST receptor binding moiety and a radioactive active moiety wherein the conjugated compound is present in an amount effective for diagnostic use in humans suffering from colorectal cancer and then detecting

the localization and accumulation of radioactivity in the individual's body are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1T 79153-26-7 86825-60-7 89091-07-6
92465-93-5 92465-94-6 95260-78-9
95260-79-0 95260-80-3 95260-81-4
96107-39-0 96107-40-3 96107-41-4
96107-42-5 96107-43-6 96121-87-8
99237-32-8 166313-08-2 166313-09-3
166313-10-6 166313-11-7 166313-12-8
166313-13-9 166313-14-0 166313-15-1
166313-16-2 166313-17-3 166313-18-4
166313-19-5 166313-20-8 166313-21-9
166313-22-0 166313-23-1 166313-24-2
166313-25-3 166313-27-5 166313-32-2

(treating metastatic colorectal cancer with heat-stable toxin (ST) receptor-binding compds.)

L38 ANSWER 25 OF 32 USPATFULL on STN

ACCESSION NUMBER: 1998:30870 USPATFULL Full-text

TITLE: Methods of and kits and compositions for diagnosing

colorectal tumors and metastasis thereof

INVENTOR(S): Waldman, Scott A., Ardmore, PA, United States

PATENT ASSIGNEE(S): Thomas Jefferson University, Philadelphia, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5731159 19980324 APPLICATION INFO.: US 1997-789270 19970128 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-305056, filed on 13

Sep 1994, now patented, Pat. No. US 5601990

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Scheiner, Toni R.

LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris, LLP

NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 1370

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In vitro methods of determining whether or not an individual has metastasized colorectal cancer cells are disclosed. In vitro methods of determining whether or not tumor cells are colorectal in origin are disclosed. In vitro kits for practicing the methods of the invention and to reagents and compositions useful to practice the methods, for example as components in such in vitro kits of the invention are provided. Methods of and kits and compositions for analyzing tissue samples from the colon tissue to evaluate the extent of metastasis of colorectal tumor cells are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1T 79153-26-7DP, conjugates 86825-60-7DP, conjugates 89091-07-6DP, conjugates 92465-93-5DP, conjugates 92465-94-6DP, conjugates 95260-78-9DP, conjugates 95260-80-3DP,

conjugates 95260-81-4DP, conjugates 96107-39-0DP, conjugates 96107-40-3DP, conjugates 96107-41-4DP, conjugates 96107-42-5DP, conjugates 96107-43-6DP, conjugates 96121-87-8DP, conjugates 99237-32-8DP, conjugates 166313-08-2DP, conjugates 166313-09-3DP, conjugates 166313-10-6DP, conjugates 166313-11-7DP, conjugates 166313-12-8DP, conjugates 166313-13-9DP, conjugates 166313-14-0DP, conjugates 166313-15-1DP, conjugates 166313-16-2DP, conjugates 166313-17-3DP, conjugates 166313-18-4DP, conjugates 166313-19-5DP, conjugates 166313-20-8DP, conjugates 166313-21-9DP, conjugates 166313-22-0DP, conjugates 166313-23-1DP, conjugates 166313-24-2DP, conjugates 166313-25-3DP, conjugates 166313-26-4DP, conjugates 166313-27-5DP, conjugates 166313-28-6DP, conjugates 166313-32-2DP, conjugates 166313-34-4DP, radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-35-5DP , radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-36-6DP, radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-37-7DP , conjugates with heat-stable toxin peptides 166313-38-8DP, conjugates with heat-stable toxin peptides (compns. containing heat-stable toxin conjugates that specifically bind to colorectal cancer cells and methods for their use) L38 ANSWER 26 OF 32 USPATFULL on STN 97:94352 USPATFULL Full-text Target proteins for eukaryotic tyrosine kinases INVENTOR(S): Schlessinger, Joseph, New York, NY, United States

ACCESSION NUMBER:

TITLE:

Skolnik, Edward Y., New York, NY, United States

PATENT ASSIGNEE(S):

Margolis, Benjamin L., New York, NY, United States New York University, New York, NY, United States (U.S.

corporation)

KIND DATE NUMBER -----

PATENT INFORMATION: APPLICATION INFO.:

US 5677421 19971014 US 1994-208887 19940311 (8)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1992-906349, filed on 30 Jun 1992, now patented, Pat. No. US 5434064, issued on 18 Jul 1995 And Ser. No. US 1993-167035, filed on 16 Dec 1993 which is a division of Ser. No. US -906349 which is a continuation-in-part of Ser. No. US 1991-643237, filed on 18 Jan 1991, now abandoned

DOCUMENT TYPE:

Utility Granted Ulm, John

FILE SEGMENT: PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Pennie & Edmonds

NUMBER OF CLAIMS:

16 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

84 Drawing Figure(s); 74 Drawing Page(s)

LINE COUNT:

3373

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ

A novel expression cloning method is provided for the detection, identification and purification of target proteins capable of binding at least to a tryosine-phosphorylated domain of a eukaryotic tyrosine kinase using novel peptide probes comprising an amino acid sequence substantially corresponding to a portion of a tyrosine-phosphorylated domain of a tyrosine kinase. The probe has at least one phosphorlated tyrosine residue and may be detectably labeled. Also disclosed is a method for preparing the probe, a method for mapping to a chormosome a gene encoding a protein capable of binding to tyrosine-phosphorylated domains of tyrosine kinases, and a method for purifiying such a protein with the probe. Non-limiting examples of novel proteins/discovered using the above cloning method include GRB-1, GRB-2, GRB-3, GRB-4 and GRB-7, as well as nucleic acid encoding these proteins, and methods for detecting these proteins are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

T 171841-69-3, Protein GRB 2 (human clone 10-53)

(amino acid sequence; affinity-based expression cloning method for identifying eukaryotic tyrosine kinases and novel target proteins)

L38 ANSWER 27 OF 32 USPATFULL on STN

ACCESSION NUMBER: 97:12331 USPATFULL Full-text

TITLE: Methods of diagnosing colorectal tumors and metastasis

thereof

INVENTOR(S): Waldman, Scott A., Ardmore, PA, United States

PATENT ASSIGNEE(S): Thomas Jefferson University, Philadelphia, PA, United

States (U.S. corporation)

NUMBER KIND DATE
-----US 5601990 19970211
US 1994-305056 19940913 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Scheiner, Toni R.

LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 1340

PATENT INFORMATION:

APPLICATION INFO.:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

In vitro methods of determining whether or not an individual has metastasized colorectal cancer cells are disclosed. In vitro methods of determining whether or not tumor cells are colorectal in origin are disclosed. In vitro kits for practicing the methods of the invention and to reagents and compositions useful to practice the methods, for example as components in such in vitro kits of the invention are provided. Methods of and kits and compositions for analyzing tissue samples from the colon tissue to evaluate the extent of metastasis of colorectal tumor cells are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1T 79153-26-7DP, conjugates 86825-60-7DP, conjugates 89091-07-6DP, conjugates 92465-93-5DP, conjugates 92465-94-6DP, conjugates 95260-78-9DP, conjugates 95260-80-3DP, conjugates 95260-81-4DP, conjugates 96107-39-0DP, conjugates 96107-40-3DP, conjugates 96107-40-3DP, conjugates 96107-41-4DP, conjugates

96107-42-5DP, conjugates 96107-43-6DP, conjugates 96121-87-8DP, conjugates 99237-32-8DP, conjugates 166313-08-2DP, conjugates 166313-09-3DP, conjugates 166313-10-6DP, conjugates 166313-11-7DP, conjugates 166313-12-8DP, conjugates 166313-13-9DP, conjugates 166313-14-0DP, conjugates 166313-15-1DP, conjugates 166313-16-2DP, conjugates 166313-17-3DP, conjugates 166313-18-4DP, conjugates 166313-19-5DP, conjugates 166313-20-8DP, conjugates 166313-21-9DP, conjugates 166313-22-0DP, conjugates 166313-23-1DP, conjugates 166313-24-2DP, conjugates 166313-25-3DP, conjugates 166313-26-4DP, conjugates 166313-27-5DP, conjugates 166313-28-6DP, conjugates 166313-32-2DP, conjugates 166313-34-4DP, radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-35-5DP , radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-36-6DP, radioactive iodine-labeled, conjugates with heat-stable toxin peptides 166313-37-7DP , conjugates with heat-stable toxin peptides 166313-38-8DP, conjugates with heat-stable toxin peptides (compns. containing heat-stable toxin conjugates that specifically bind to colorectal cancer cells and methods for their use)

L38 ANSWER 28 OF 32 USPATFULL on STN

ACCESSION NUMBER: 96:43543 USPATFULL Full-text

TITLE: ST receptor binding compounds and methods of using the

same

INVENTOR(S): Waldman, Scott A., Ardmore, PA, United States

PATENT ASSIGNEE(S): Thomas Jefferson University, Philadelphia, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5518888 19960521
APPLICATION INFO.: US 1993-141892 19931026 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Scheiner, Toni R. ASSISTANT EXAMINER: Green, Lora M.

LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1 LINE COUNT: 3242

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Conjugated compounds which comprises an ST receptor binding moiety and a radiostable active moiety are disclosed. Pharmaceutical compositions comprising a pharmaceutically acceptable carrier or diluent, and a conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding moiety and a radioactive active moiety are disclosed. Methods of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent, and a therapeutically effective amount of a conjugated compound which comprises an ST receptor binding moiety and a radiostable active moiety or an ST receptor binding

moiety and a radiostable active moiety are disclosed. Methods of radioimaging metastasized colorectal cancer cells comprising the steps of first administering to an individual suspected of having metastasized colorectal cancer cells, a pharmaceutical composition that comprises a pharmaceutically acceptable carrier or diluent, and conjugated compound that comprises an ST receptor binding moiety and a radioactive active moiety wherein the conjugated compound is present in an amount effective for diagnostic use in humans suffering from colorectal cancer and then detecting the localization and accumulation of radioactivity in the individual's body are disclosed.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     79153-26-7DP, conjugates 86825-60-7DP,
      conjugates 89091-07-6DP, conjugates
      92465-93-5DP, conjugates 92465-94-6DP,
     conjugates 95260-78-9DP, conjugates
      95260-79-0DP, conjugates 95260-80-3DP,
     conjugates 95260-81-4DP, conjugates
      96107-39-0DP, conjugates 96107-40-3DP,
     conjugates 96107-41-4DP, conjugates
      96107-42-5DP, conjugates 96107-43-6DP,
     conjugates 96121-87-8DP, conjugates
     99237-32-8DP, conjugates 166313-08-2DP,
     conjugates 166313-09-3DP, conjugates
     166313-10-6DP, conjugates 166313-11-7DP,
     conjugates 166313-12-8DP, conjugates
     166313-13-9DP, conjugates 166313-14-0DP,
     conjugates 166313-15-1DP, conjugates
     166313-16-2DP, conjugates 166313-17-3DP,
     conjugates 166313-18-4DP, conjugates
     166313-19-5DP, conjugates 166313-20-8DP,
     conjugates 166313-21-9DP, conjugates
     166313-22-0DP, conjugates 166313-23-1DP,
     conjugates 166313-24-2DP, conjugates
     166313-25-3DP, conjugates 166313-26-4DP,
     conjugates 166313-27-5DP, conjugates
     166313-28-6DP, conjugates 166313-32-2DP,
     conjugates 166313-34-4DP, radioactive iodine-labeled,
     conjugates with heat-stable toxin peptides 166313-35-5DP
      , radioactive iodine-labeled, conjugates with heat-stable toxin
     peptides 166313-36-6DP, radioactive iodine-labeled,
     conjugates with heat-stable toxin peptides 166313-37-7DP
      , conjugates with heat-stable toxin peptides
     166313-38-8DP, conjugates with heat-stable toxin
     peptides
       (compns. containing heat-stable toxin conjugates that
       specifically bind to colorectal cancer cells and methods for their use)
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L38 ANSWER 29 OF 32 USPATFULL on STN

ACCESSION NUMBER:

89:98829 USPATFULL Full-text

TITLE:

Synthetic heat-stable enterotoxin polypeptide of

Escherichia coli and multimers thereof

INVENTOR(S):

Houghten, Richard A., Solana Beach, CA, United States Scripps Clinic and Research Foundation, La Jolla, CA,

United States (U.S. corporation)

NUMBER KIND DATE -----US 4886663 19891212

PATENT INFORMATION:

PATENT ASSIGNEE(S):

APPLICATION INFO.: US 1983-559469 19831212 (6)

DISCLAIMER DATE: 20030729

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1983-455265, filed

on 3 Jan 1983, now patented, Pat. No. US 4545931

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Phillips, Delbert R.

LEGAL REPRESENTATIVE: Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 22 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 3825

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

As synthetic polypeptide having at least about 10% of the immunological activity of biologic heat-stable enterotoxin of E. coli. The synthetic polypeptide includes at least 14 amino acids in the sequence, from aminoterminus to carboxy-terminus, represented by the formula:

CysCysGluLeuCysCysTyr-(Asn)ProAlaCysAla(Thr)GlyCysAsn(Tyr) wherein the amino acid in parentheses may replace the immediately preceding amino acid residue, and at least one intramolecular disulfide bond formed between the Cys residues. The Cys residues that are not part of the intramolecular disulfide bond can be replaced by other amino acid residues or be bonded to substituent moieties. The polypeptides can be a monomeric or multimeric material containing an intramolecular, intrapolypeptide and/or an intramolecular, interpolypeptide cystine disulfide bond.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 89091-07-6P 94388-50-8P 94396-21-1DP, oxidized 94396-21-1P

(preparation of, as synthetic heat-stable enterotoxin)

L38 ANSWER 30 OF 32 USPATFULL on STN

ACCESSION NUMBER: 88:45739 USPATFULL Full-text

TITLE: Synthetic polypeptide corresponding to a portion of the

heat-labile enterotoxin of escherichia coli,

compositions and methods of therewith

INVENTOR(S): Houghten, Richard A., Solana Beach, CA, United States PATENT ASSIGNEE(S): Scripps Clinic and Research Foundation, La Jolla, CA,

United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4758655 19880719

PARENT INFORMATION: US 4758655 19880719

APPLICATION INFO.: US 1987-71606 19870709 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1985-760753, filed on 22

Jul 1985, now abandoned which is a continuation-in-part
of Ser. No. US 1983-559469, filed on 12 Dec 1983 which
is a continuation-in-part of Ser. No. US 1983-455265,
filed on 3 Jan 1983, now patented, Pat. No. US 4545931,

issued on 8 Oct 1983

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Phillips, Delbert R.

LEGAL REPRESENTATIVE: Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 2714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Synthetic polypeptides containing about 10 to about 35 amino acid residues corresponding in sequence to the amino acid residue sequence of about position 35 to about position 95 from the amino-terminus of the B-subunit of the heat-labile enterotoxin of Escherichia coli are disclosed along with composite polypeptides containing the polypeptide sequence of the heatstable Escherichia coli enterotoxin, as are polymers containing the synthetic polypeptide and composite polypeptide as repeating units. The polypeptides are useful as conjugates coupled to a carrier or as a polymer as the active ingredient of an inoculum to raise antibodies and for protecting an animal host against infection by heat-labile enterotoxinproducing bacteria.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

89091-07-6P 94388-50-8P 94396-21-1DP, oxidized 94395-21-1P

(preparation of, as synthetic heat-stable enterotoxin)

L38 ANSWER 31 OF 32 USPATFULL on STN

ACCESSION NUMBER: 85:59432 USPATFULL Full-text

TITLE: Synthetic heat-stable enterotoxin polypeptide of

Escherichia coli

INVENTOR(S): Houghten, Richard A., Solana Beach, CA, United States

PATENT ASSIGNEE(S): Scripps Clinic and Research Foundation, La Jolla, CA,

United States (U.S. corporation)

NUMBER KIND -----PATENT INFORMATION: 19851008

US 4545931 US 1983-455265 19830103 (6) APPLICATION INFO.:

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Phillips, Delbert R.

LEGAL REPRESENTATIVE: Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd. NUMBER OF CLAIMS: 12

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 16 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 2268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ A synthetic polypeptide having at least about 40% of the antigenicity of biologic heat stable enterotoxin of E. coli. The synthetic polypeptide includes at least 14 amino acids in the sequence, from amino-terminus to carboxy-terminus, represented by the formula:

CysCysGluLeuCysCysTyr(Asn)ProAlaCysAla(Thr)GlyCysAsn(Tyr) wherein the amino acid in parentheses may replace the immediately preceding amino acid residue, and at least one intramolecular disulfide bond formed between the Cys residues. The Cys residues that are not part of the intramolecular disulfide bond can be replaced by other amino acid residues or be bonded to substituent moieties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

89091-07-6P 94388-50-8P 94396-21-1DP, oxidized

94396-21-1P

(preparation of, as synthetic heat-stable enterotoxin)

L38 ANSWER 32 OF 32 USPATFULL on STN

ACCESSION NUMBER: 85:8962 USPATFULL Full-text

Synthetic ST toxin, process for its preparation and its TITLE:

use as a vaccinating agent

INVENTOR(S):

Duflot, Anabela, Vanves, France

Gras, Helene, Hem, France

Tartar, Andre, Vitry-en-Artois, France

Duflot, Edith, Cachan, France Boquet, Patrice, Creteil, France

PATENT ASSIGNEE(S):

Institut Pasteur, Paris, France (non-U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_

PATENT INFORMATION: APPLICATION INFO.:

US 4499080 19850212 US 1983-488712 19830426

19830426 (6)

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

FR 1982-7179 19820426

DOCUMENT TYPE:

Utility

FILE SEGMENT: PRIMARY EXAMINER:

Granted Phillips, Delbert R.

LEGAL REPRESENTATIVE: Weiser & Stapler

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

5 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to novel synthetic peptides, process for their peparation and their application to the production of antibodies .

These peptides include at the most 18 amino-acids and at the least 4 aminoacids in which n is equal to 1 or 2, and when n equals 1 the peptidic sequence P is contained in the following peptidic chain:

Asn-Thr-Phe-Tyr-Cys-Cys-Glu-Leu-Cys-Cys-A-Pro-Ala-Cys-Ala-Gly-Cys-T

in which either A represents Asn and T represents Tyr, or A represents Tyr and T represents Asn and in which the thiol groups of the possible cysteyl residues are protected by groups stable under biological conditions. Use for the production of antibodies capable of replacing biological activity particularly of enterotoxins produced by Escherichia coli strains.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 79153-26-7P 89091-07-6P

(preparation and immunol. properties of)

=> sel hit rn 138 1-L38 WAS CREATED DURING MULTIFILE PROCESSING AND CANNOT BE USED WHEN CREATING E#S